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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,658	03/11/2008	Marc Theisen	10191/4142	2557

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EXAMINER	
LAU, KEVIN	
ART UNIT	PAPER NUMBER
2612	
MAIL DATE	DELIVERY MODE
05/13/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/575,658	THEISEN, MARC	
	Examiner	Art Unit	
	KEVIN LAU	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 April 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/14/2006, 12/11/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 10-13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Caruso et al. (US 6548914).

As per claim 10,

Caruso discloses a device for determining an instant a vehicle makes contact with an impact object ***(col. 2 lines 15-23: crash sensor)***, comprising: an arrangement for determining the instant of contact by approximating a signal derived from an acceleration signal using a function ***(col. 2 lines 24-41: deriving the velocity from the acceleration signal)***.

As per claim 11,

Caruso discloses further comprising: an arrangement for one of filtering the acceleration signal ***(col. 3 lines 14-17: low pass filter)***.

As per claim 15,

Caruso discloses further comprising: an arrangement for approximating the signal using at least two threshold values ***(col. 2 lines 24-41: a minimum limit and a maximum limit value)***.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 12-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Caruso et al. (US 6548914) in view of Wang (US 5559697).

As per claim 12,

Caruso does not disclose further comprising: an arrangement for taking into account an impact velocity when determining the instant of contact.

Wang discloses further comprising: an arrangement for taking into account an impact velocity when determining the instant of contact ***(Abstract: vehicle impact velocity can be obtained from speed sensors and determines severity of crash)***.

At the time of invention, it would have been obvious to a person with ordinary skill in the art to modify Caruso's impact detection system to determine the impact velocity, as taught by Wang.

The motivation would be to utilize known parameters in a vehicle crash to determine whether a collision has occurred.

The Supreme Court in KSR International Co. v. Teleflex Inc., 550 U.S. ___,___, 82 USPQ2d 1385, 1395-97 (2007) identified a number of rationales to support a conclusion of obviousness which are consistent with the proper "functional approach" to the determination of obviousness as laid down in Graham. The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.

See MPEP Section 2143.

As per claim 13,

Caruso in view of Wang discloses wherein the arrangement for taking into account the impact velocity determines the impact velocity as a function of a vehicle velocity ***(Abstract: vehicle impact velocity can be obtained from speed sensors and determines severity of crash)***.

3. Claim 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Caruso et al. (US 6548914) in view of Wang (US 5559697) and in further view of Evans (US 6756887).

As per claim 14,

Caruso in view of Wang does not disclose wherein the arrangement for taking into account the impact velocity determines the impact velocity as a function of a surrounding-field signal.

Evans discloses wherein the arrangement for taking into account the impact velocity determines the impact velocity as a function of a surrounding-field signal ***(col. 8 lines 18-37: the GPS is used to calculate the vehicle speed along with determination of a collision)***.

At the time of invention, it would have been obvious to a person with ordinary skill in the art to modify Caruso in view of Wang's impact detection system to determine the impact velocity from a surrounding signal, as taught by Evans.

The motivation would be to augment the detection of the collision by taking into consideration a reasonable directional change for a given speed ***(col. 7 line 62- col.8 line 23)***.

4. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caruso et al. (US 6548914) in view of Imai (JP2001-247001).

As per claim 16,

Caruso does not disclose wherein the arrangement for determining uses a quadratic function.

Imai discloses wherein the arrangement for determining uses a quadratic function ***(Abstract: the integration of the acceleration is approximated to a quadratic curve)***.

At the time of invention, it would have been obvious to a person with ordinary skill in the art to modify Caruso's impact detection system to use a quadratic function, as taught by Imai.

The motivation would be to quickly determine if a collision has occurred ***(Abstract)***.

As per claim 17,

Caruso in view of Imai discloses wherein the arrangement for determining determines the instant of contact from a vertex of the quadratic function ***(Abstract: locus of the integral of the deceleration)***.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caruso et al. (US 6548914) in view of Imai (JP2001-247001) and in further view of Oishi et al. (US 3945459).

As per claim 18,

Caruso in view of Imai does not disclose further comprising: an arrangement for taking into account an impact velocity linearly in the determination of the instant of contact.

Oishi discloses further comprising: an arrangement for taking into account an impact velocity linearly in the determination of the instant of contact ***(col. 13 line 52- col. 14 line 4: the attenuation is reduced to create a linear relationship for the impact velocity)***.

At the time of invention, it would have been obvious to a person with ordinary skill in the art to modify Caruso in view of Imai's impact detection system to taking into account the impact velocity linearly, as taught by Oishi.

The motivation would be to more accurately determine whether a collision has occurred ***(col. 13 line 52- col. 14 line 4)***.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a

nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 10 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 10/512756. Although the conflicting claims are not identical, they are not patentably distinct from each other because they seek to encompass the same invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim 10 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 5 of copending application number 10/512756.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both the claims of instant application and the claims of copending application number 10/5127560 are almost the same in scope although copending application's claim is more narrow in scope than the instant application claims with the additional limitations of the threshold function

and activation time. Therefore it would have been obvious to one of ordinary skill in the art to modify copending application claim to omit the additional limitations as to arrive at instant application's claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN LAU whose telephone number is (571)270-5168. The examiner can normally be reached on M-F 9:30 am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian A. Zimmerman can be reached on (571) 272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KL/

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612